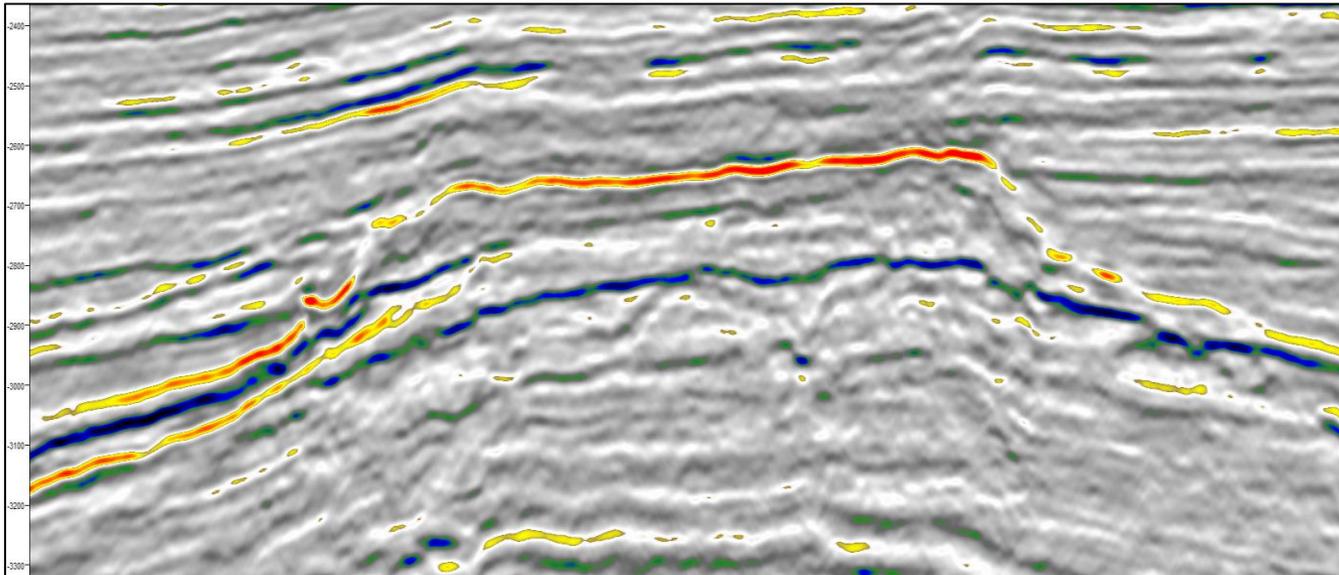


Melbana Energy Good Oil Conference 2019

GoodOilConference

11 – 12 September 2019



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Contingent and Prospective Resources: Unless otherwise specified, the information that relates to Contingent Resources and Prospective Resources for Melbana is based on, and fairly represents, information and supporting documentation compiled by Mr. Dean Johnstone, who is an employee of the company and has more than 34 years of relevant experience. Mr. Johnstone is a member of the American Association of Petroleum Geologists. Mr. Johnstone consents to the publication of the resource assessments contained herein. The Contingent Resource and Prospective Resource estimates are consistent with the definitions of hydrocarbon resources that appear in the Listing Rules. Conversion factors: 6 Bscf gas equals 1 MMboe; 1 bbl condensate equals 1 boe

Company Overview

Company Data

Listed	1998
Exchange	ASX (“MAY”)
Shares on issue	~1,875 million
Options/Rights	~180/~4 million
Market Cap (30 Aug 19)	~A\$20.6 million
Cash (30 Jun 19)	~A\$3.7 million

Shareholders

Cadence Capital	~ 7%
Board/Management	~ 5 %
Top 20	~ 28%

Experienced Board and Management

- Decades of international experience in Oil & Gas
- Technical, Financial and Commercial backgrounds
- Extensive fold and thrust belt experience

12 Month Share Price Performance



Board and Management

Board of Directors



Andrew Purcell
Chairman



Peter Stickland
Technical Director



Michael Sandy
Non-Executive Director
(Interim CEO)

Senior Team



Melanie Leydin
CFO



Errol Johnstone
Chief Geoscientist



Dean Johnstone
Senior Geoscientist



Dr. Rafael Tenreiro
Cuba Representative

Melbana offer for Metgasco

1. On 15 July 2019 Melbana Energy announced its intention to offer four of its shares for each share of Metgasco Limited (ASX:MEL)
2. Key conditions include Melbana Energy receiving acceptances for a minimum of 50.1% of Metgasco shares on issue and non-conflicted Melbana Energy shareholders approving the transaction
3. Melbana Energy already has a relevant interest in 19.6% of Metgasco due to a pre-bid agreement it has entered into with an entity associated with Andrew Purcell, a director of Melbana Energy
4. Metgasco is an ASX listed oil and gas company with exploration projects in Queensland and a substantial shareholding in Byron Energy Limited (BYE:ASX)
5. A Bidder's Statement was released earlier this week

Projects Summary

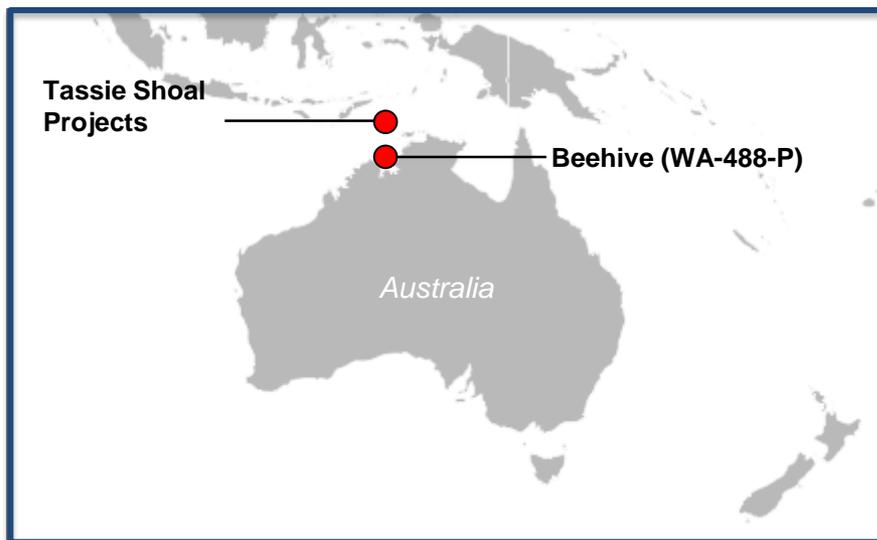


Cuba - Block 9, 100%

- Onshore block in Cuba's northern fold belt trend
- Potential of ~14.8 billion barrels of oil in place, recoverable Prospective Resources of 676 million barrels of oil¹

Cuba - Santa Cruz²

- Enhancement of oil production for existing oil field
- Potential future sources of near term production cash flow



Australia - Beehive, 100%³

- Potentially largest undrilled target in Australia
- Beehive Prospective Resource estimated as 388 million barrels of oil equivalent¹
- Total and Santos completed 3D Seismic Survey with option to drill well and fund Melbana

Australia - Tassie Shoal Projects, 100%

- Low cost development paths for discovered undeveloped gas

¹ Best Estimate per Independent Expert McDaniel & Associates Report

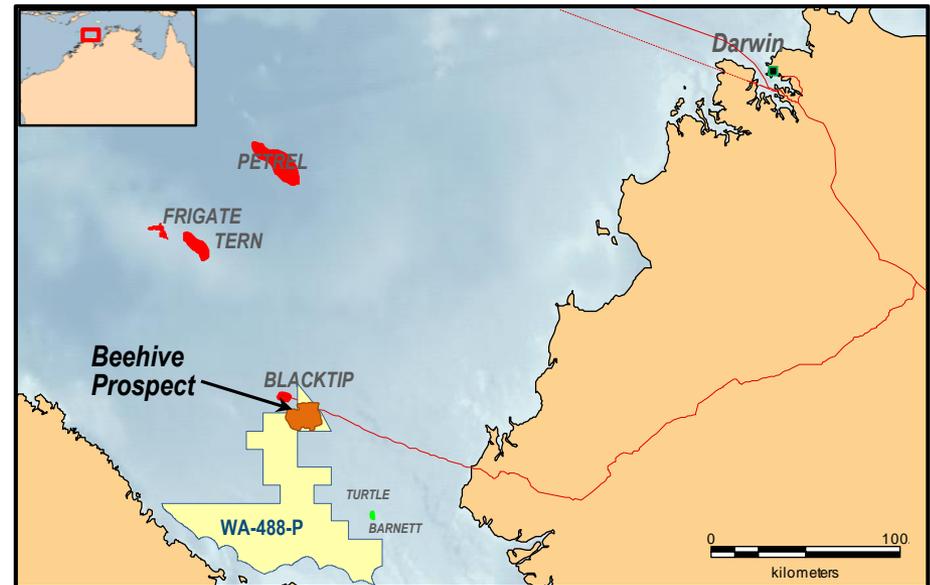
² Awaiting commercial clarification and then subject to Cuban regulatory approval

³ Subject to Total and Santos Options for cumulative 80% interest

Northern Australia: WA-488-P : Beehive Prospect

Seismic Funding/Farmin Option Agreement with Santos and Total.

- Largest undrilled oil prospect offshore Australia
- Independent Expert McDaniel & Associates Report assessed 388 MMboe best estimate
- **Total and Santos** fully funded and fast tracked Beehive 3D seismic survey in return for option to acquire 80% interest
- Have until 2 October, 2019 to notify their intent to exercise option which involves fully funding the first well
- Each party can exercise option for 40% interest, with either party having the right to take up to 80% if other party doesn't exercise
- If Total and/or Santos exercise option, Melbana retains 20% and is fully carried through drilling of first well
- Multiple paths to development, with proximal undeveloped resources and infrastructure



Prospective Resources (MMboe, 100%) ³					
Beehive	CoS*	Low	Best	High	Mean
Carboniferous objective	20%	91	388	1,645	704

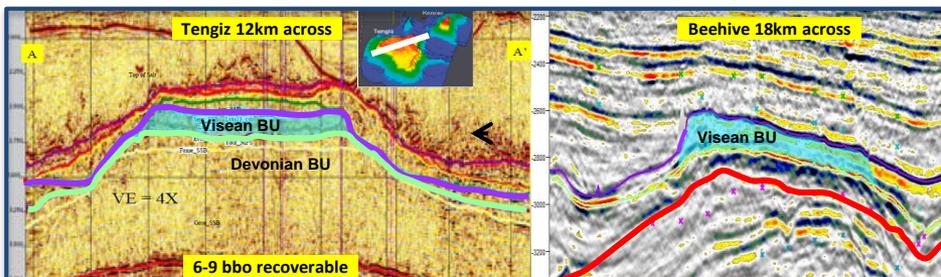
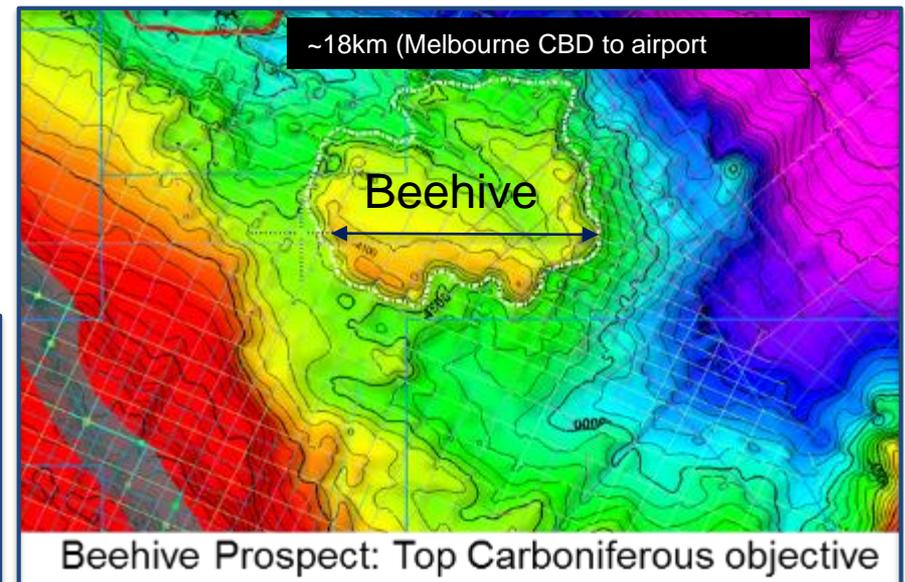
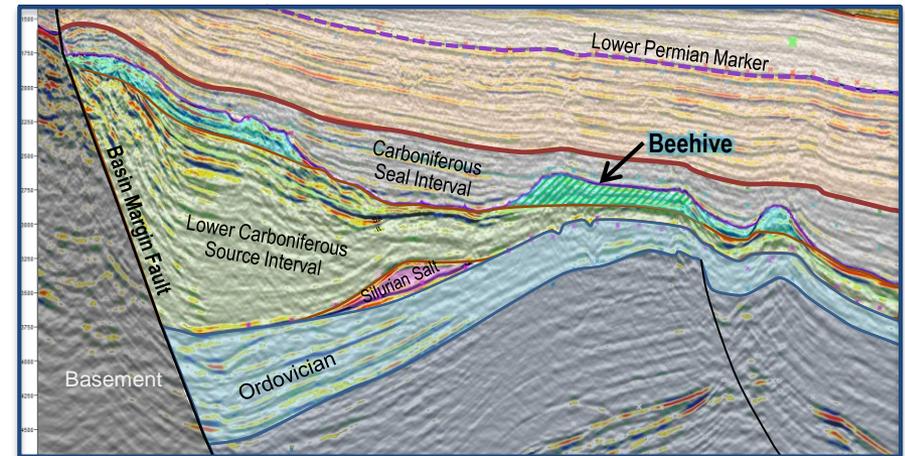
Prospective Resources Cautionary Statement - The estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Future exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons. * Chance of Success

³per Independent Expert McDaniel & Associates Report

Beehive Prospect

Beehive – an enormous feature analogous to giant Tengiz oil field

- Recent deep drilling in the offshore Canning by Santos (Dorado area) has highlighted deep success in new deeper, play ideas
- Beehive – undrilled new play type in Petrel Basin
- Isolated carbonate platform analogous to giant Tengiz oil field in Caspian Sea
 - Carbonate platform is 18km across
 - Mapped closure ~140km²
 - Vertical relief ~400 metres
- Beehive high-graded following discovery of Ungani oil field in similar setting and interpreted as same age
- Target depth ~4500m
- shallow water depth ~40m

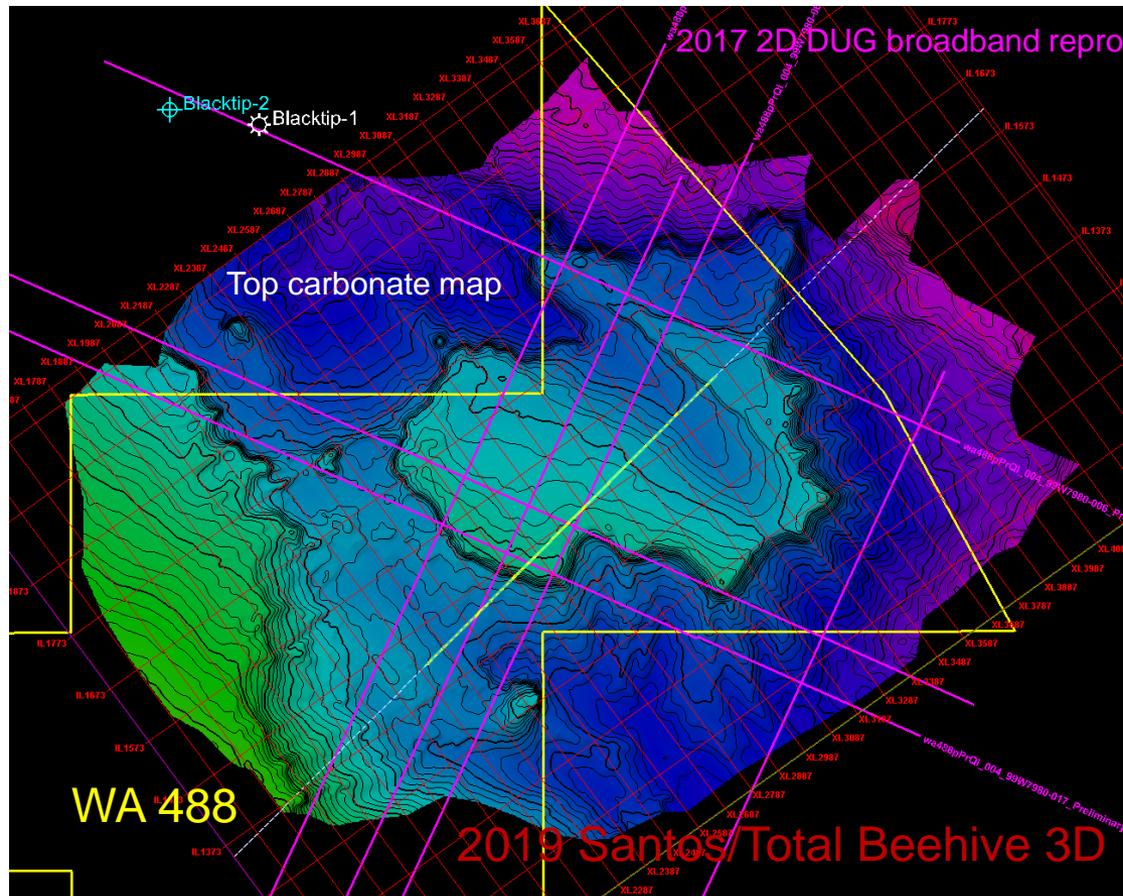


New 3D seismic survey acquired in 2018

- Santos/Total acquired ~700km² 3D seismic survey as part of their option (506km² on WA-488-P)
- Survey extended to cover “Egret” Lead which is partly within WA-488-P



- Beehive 3D seismic coverage displayed over the new Top Carbonate interpretation
- Clear isolated carbonate platform geometries visible

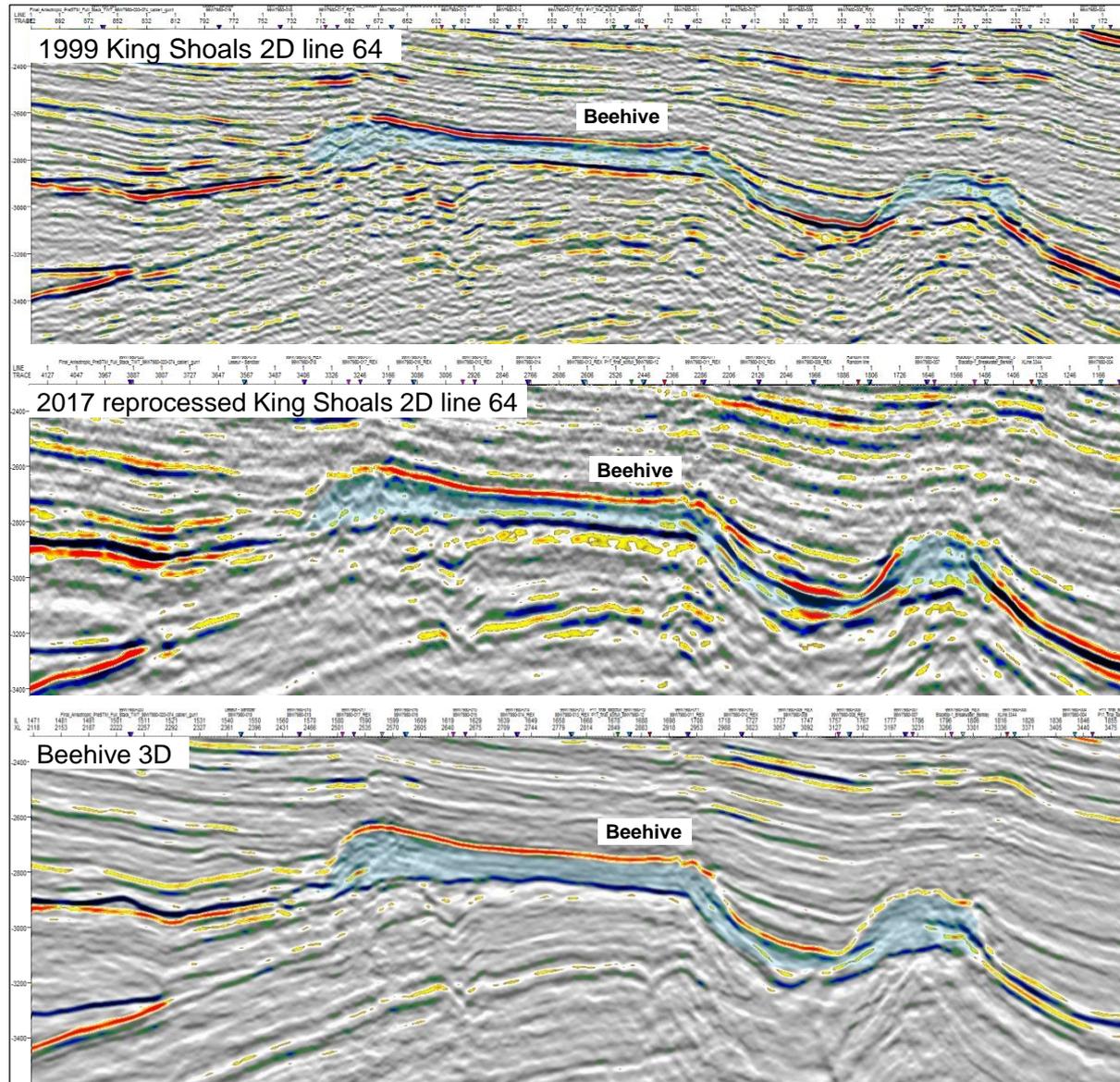


Beehive 3D seismic: Significant Improvement in platform definition

Comparison between 2D seismic with original processing, 2D with DUG Broad Reprocessing and the equivalent line from new Beehive 3D seismic data.

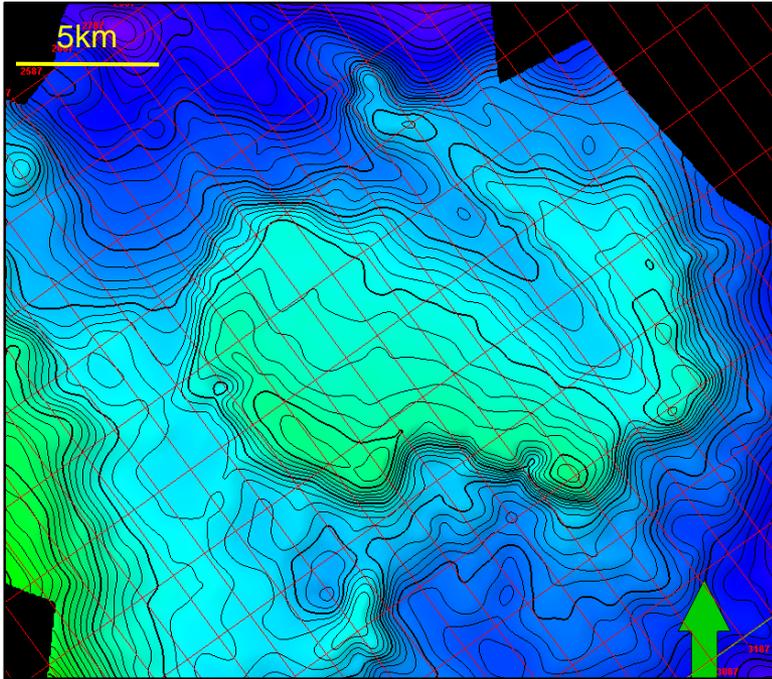
The benefits of 3D migration and modern seismic acquisition techniques have significantly improved the imaging of a number of Beehive's key features:

1. The isolated platform's near-vertical edges are now well defined
2. Details of Beehive's complex internal architecture are seen for the first time, providing information about facies distribution and depositional history

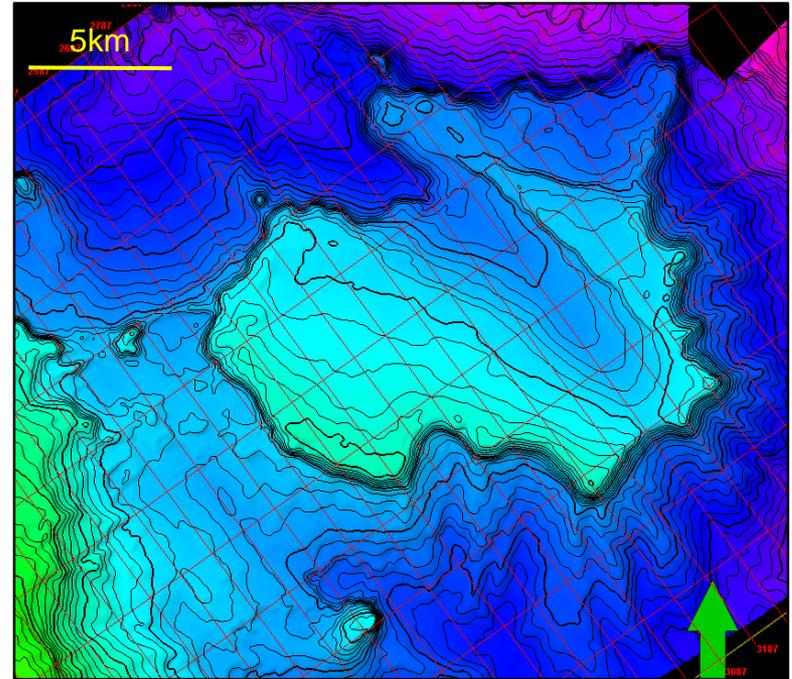


Beehive 3D seismic: Improvement in Top Reservoir Map

2017 reprocessed King Shoals 2D seismic



Beehive 3D seismic



Preliminary interpretation reveals:

- Overall resolution of the Beehive isolated platform has improved with sharper edges providing more confidence in structural closure
- Data quality to the north-east significantly improved allowing better structural definition
- Carbonate platform facies distribution (rim v. lagoon v. syncline) better defined

Next Steps

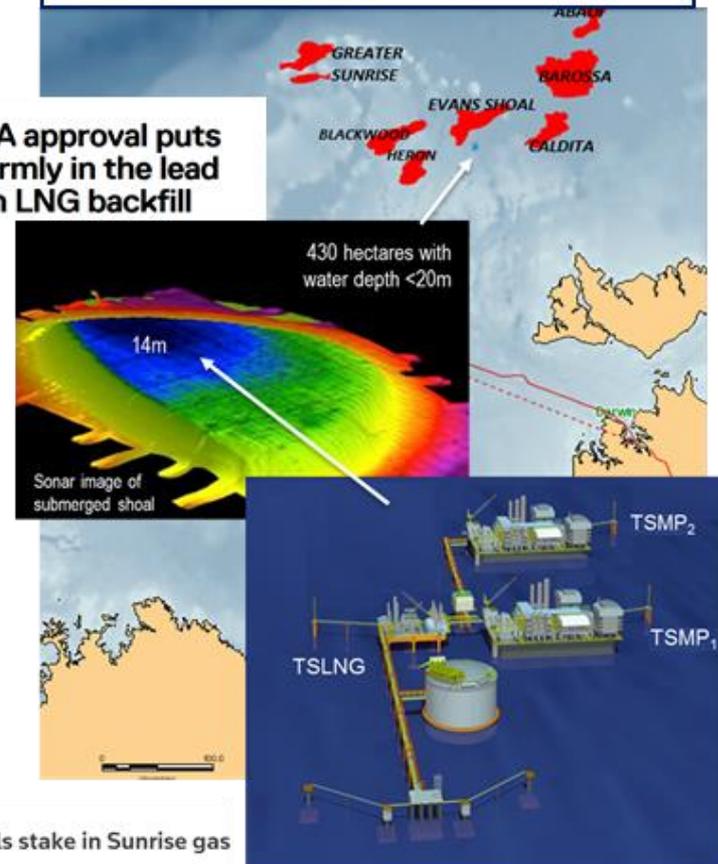
- Complete the Interpretation of the new Beehive 3D seismic
- Decision by Santos/Total to notify the intent to exercise their option by 2 October 2019
- Well Planning is advancing in parallel in order to be prepared for drilling in late 2020
- Potential ground breaking new play discovery with large amount of running room if successful

Australia - Industry changes around Tassie Shoal Projects

- Melbana (100%) has Federal & State Government Environmental approvals valid to 2052 to build two methanol and one LNG plant
- Evans Shoal and Barossa in race to replace declining Bayu-Undan production into Darwin LNG facilities
- Feedstock may become available as a result of development into Darwin LNG
- Evans Shoal is 28% CO₂ making it expensive to develop standalone and methanol production optimised with 30% CO₂
- Methanol is a widely traded liquid with many industrial and energy uses
- Investor support for methanol project if gas made available.
- Potential for value creation via carried interest in development and/or tolling income

Tassie Shoal Projects - Gas available?

21 Mar 2018
NOPSEMA approval puts Barossa firmly in the lead for Darwin LNG backfill

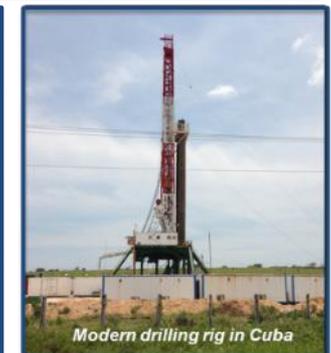


NEWS - OCTOBER 1, 2016 11:30 PM + A DATE 400

ConocoPhillips sells stake in Sunrise gas field to East Timor

Cuba – Why?

- Under-explored
- Huge oil potential
- Produce half of domestic needs
- Investment climate
 - No evidence of corruption
 - Government support for oil industry
 - Tax rate
 - Tax holiday
- Good local infrastructure
- Educated workforce
- Early mover advantage achievable
- Aligned with technical competence
- Add value by applying new exploration techniques
- Political reforms continuing



Cuba, Block 9 – Resource Assessment

McDaniel & Associates assess Prospective Resources up to 1.5 billion barrels

- Large footprint - 2,344km²
- Lightly explored
- Along trend from Varadero oil field
- 3 prospects, 16 leads identified
- Potential for large Varadero type structures
- Cuba experts McDaniel & Associates Consultants² independently assessed resources per London Alternative Investment Market (AIM) listing standards:
 - Best estimate Oil-in-Place 14.8 billion barrels of oil³
 - Best estimate recoverable oil 676 million barrels of oil³
 - High case recoverable oil 1.46 billion barrels of oil³

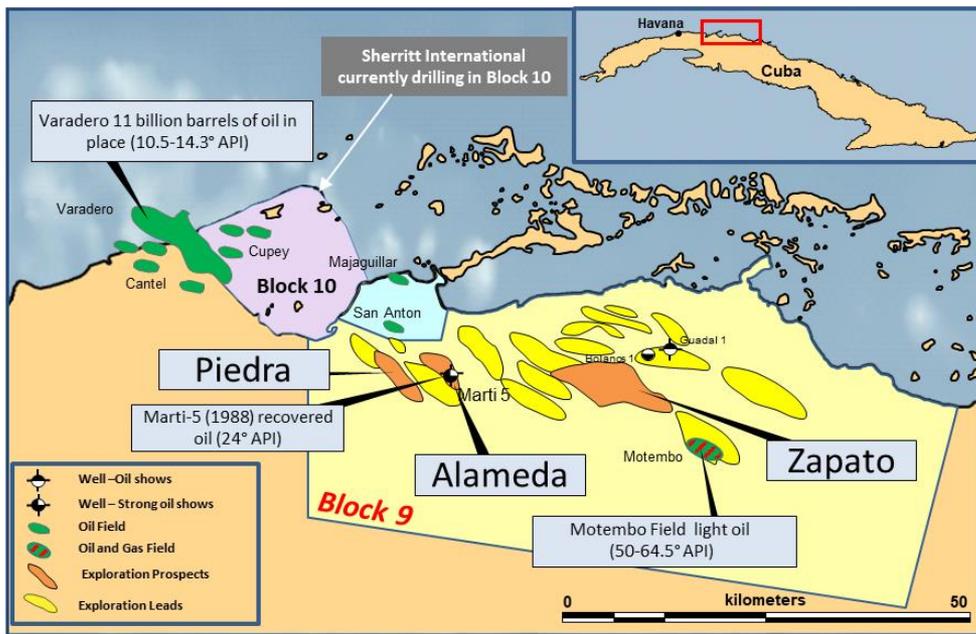


Prospective Resources Cautionary Statement - The estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Future exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.

² See www.mcdan.com/experience

³per Independent Expert McDaniel & Associates Report adjusted for minor acreage relinquishment

Cuba, Block 9 – 19 Leads in Conventional Play



Highlights

- Varying qualities of oil recovered
- Motembo, oldest oil field in Cuba is very light oil
- Sherritt active in Block 10
- 3 key targets
- Work program requires one well by November 2019. MAY have submitted proposals for a 12 month deferral as well as a further extension of a waiver of a bank guarantee requirement
- Proposed two well drilling program to test Alameda and Zapato (total US\$25-30m)

Recoverable Prospective Resources (100% MMstb)³

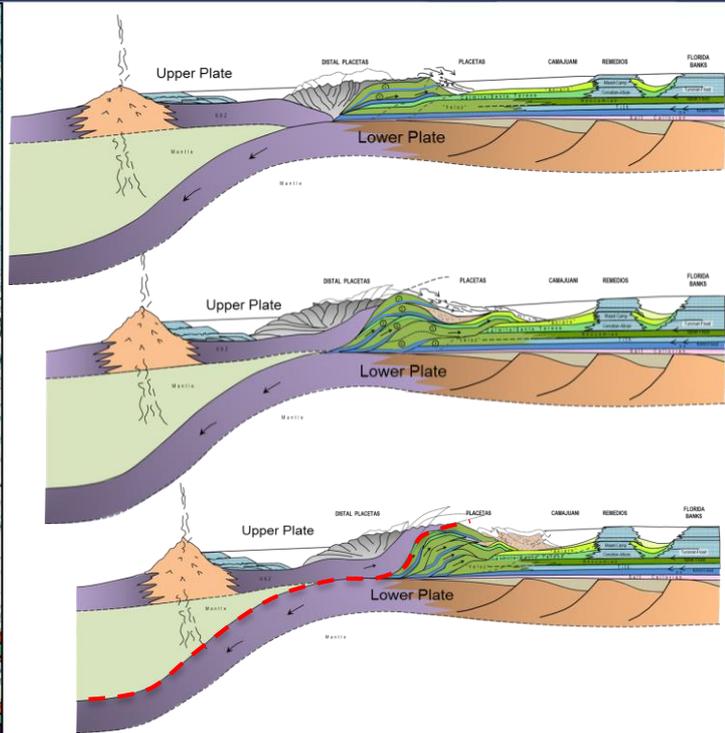
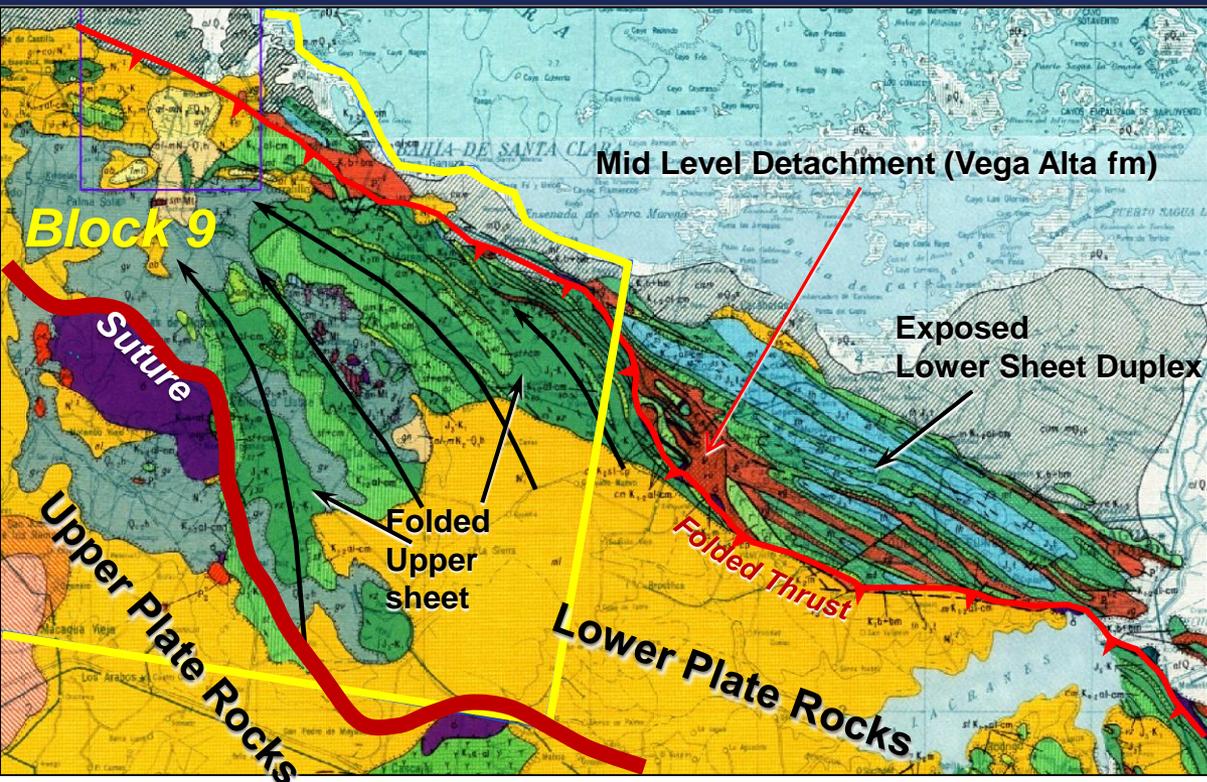
Objective	CoS*	Low	Best	High	Mean
Alameda High/(Amistad)	15%	24	60	132	71
Alameda Mid	23%	4	9	19	10
Alameda Deep	32%	39	72	128	79
Zapato	23%	38	95	214	114
Piedra	23%	14	34	76	40

Prospective Resources Cautionary Statement - The estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Future exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.

³per Independent Expert McDaniel & Associates Report

Preferred two exploration well program tests ~236MMstb prospective resource (best estimate)³

Block 9: Outcrop Expression of Structural Elements



Melbana Structural work has concluded that the following observations can be made:

- Suture between Upper Plate rocks (Arc complex / Ophiolites) and the Lower Plate Remedios succession seen in outcrop
- Lower Plate composed of an Upper sheet (distal carbonates) folded by a duplexed Lower Sheet
- Thrusted contact between the Upper and Lower sheet defines the mid level detachment.
 - The Upper Sheet was emplaced on top of the Lower Sheet during early stages.
 - The Lower Sheet is an exhumed duplex involving proximal Jurassic to early Cretaceous
 - Later structuring of the Lower Sheet refolded the Upper Sheet and the thrust contact

Block 9 - Preparations for drilling

Securing permits, equipment and services

- Initiated field work with experienced local Cuban contractors
- Field work surveys completed for Alameda-1 and Zapato-1 well sites, camp sites and access roads
- **Flat accessible well site locations**
- Civil engineering design for Alameda and Zapato sites is completed

Permitting

- Two preferred wells (Alameda & Zapato) have permits pending rig selection and timing of wells

Drilling Rig & Services

- Drilling rig international tender process undertaken

Timing

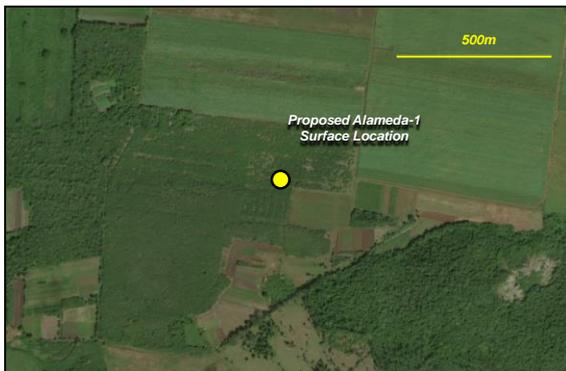
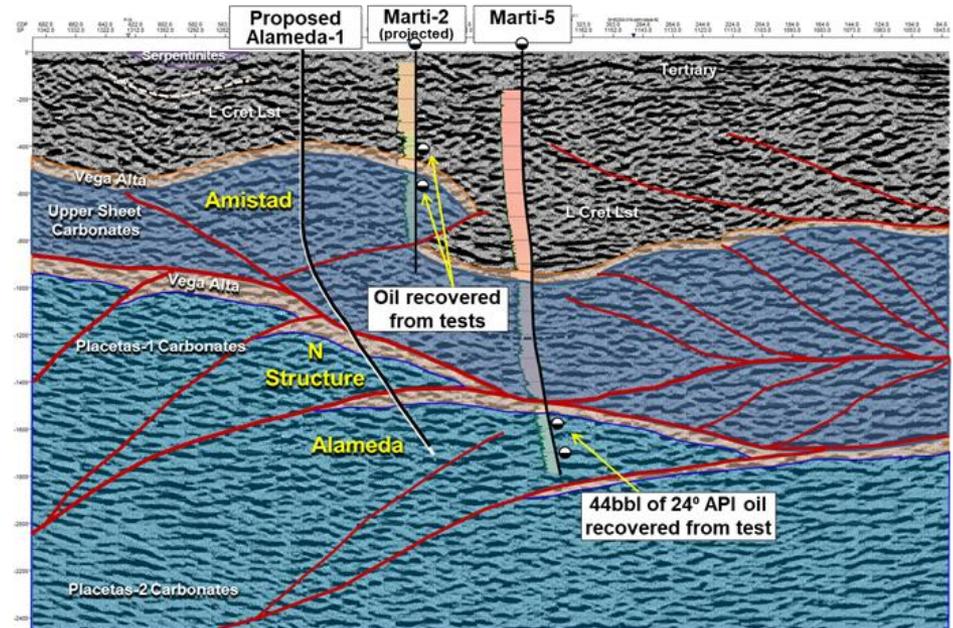
- Subject to farmout, targeting drilling in second half of 2020



Cuba, Block 9 - Alameda Prospect

Multi-target exploration drilling close to historic oil recoveries

- Three individual target zones for Alameda, two up-dip of known oil recoveries
- Marti-5 (1988) recovered oil (24°API) with oil shows over an 850 metre gross interval
- 32% chance of success at Alameda
- Best Estimate combined exploration potential:
 - 3 billion barrels oil-in-place³
 - 141 million barrels of recoverable oil³
- Primary objective depth range from 3,000 to 3,700 metres
- Accessible, all-weather surface location



Alameda Recoverable Prospective Resources (100% MMStb)³

Objective	CoS*	Low	Best	High	Mean
Amistad/(formerlyU1)	15%	24	60	132	71
N	23%	4	9	19	10
Alameda	32%	39	72	128	79

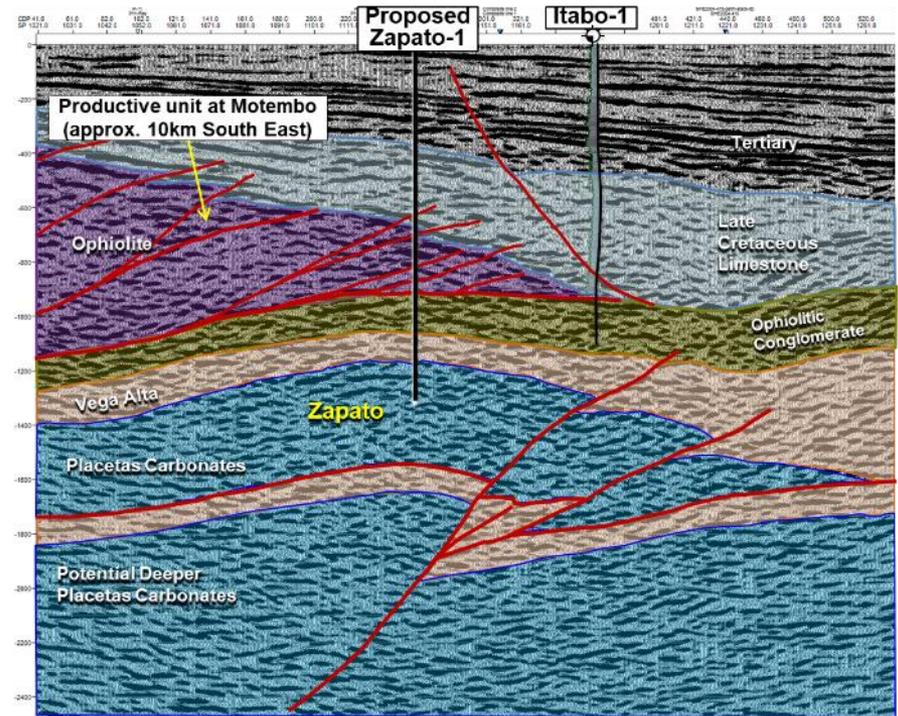
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³per Independent Expert McDaniel & Associates Report

Cuba, Block 9 – Zapato Prospect

Prominent structure with 200 million barrel oil exploration potential

- Large fractured carbonate objective
- Working oil system - adjacent to shallower Motembo oil field which produced high quality light crude (50 – 64.5° API)
- Crest of structure ~2,000 metres with nearly 1,000 metres vertical relief
- Recent gravity and magnetic study by Cuba's specialist technical laboratory CEINPET indicates strong gravity and magnetic alignment with the structural interpretation derived from seismic and surface data
- Accessible, all-weather surface location



Zapato Recoverable Prospective Resource (100%, MMstb)³

	CoS*	Low	Best	High	Mean
Zapato	23%	38	95	214	114

Prospective Resources Cautionary Statement - The estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Future exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons. * Chance of Success

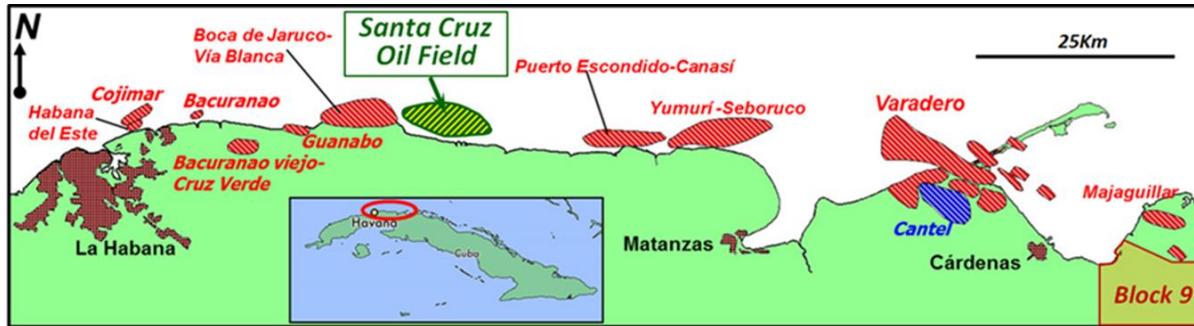
³per Independent Expert McDaniel & Associates Report

Block 9 Opportunity

- ✓ Cuba has excellent oil & gas prospectivity
- ✓ Existing fields, oil recoveries and seeps demonstrate a high quality active petroleum system in Block 9. Good quality oil
- ✓ Melbana's technical assessment has demonstrated world class, large scale exploration potential of Block 9
- ✓ Preparations for potential drilling in Block 9 in second half 2020
Cost of preferred two well program US\$25-30m
- ✓ Seeking partner to assist with funding drilling campaign, either at asset or corporate level

Cuba, Santa Cruz – Incremental Oil Contract

Accelerated path to becoming an oil producer and booking reserves in Cuba



- Incremental Oil Recovery (IOR) contract finalised in Dec 2018
 - Multiple phases, initial study period then optional implementation phase
- Part of Cuba's northern fold belt which continues into Block 9
- Discovered in 2004; initially tested at 1,250 barrels per day, oil quality 10 – 22° API
- Appraisal drilling confirmed a field area of >20km² and a significant oil column of 250 metres
- Initial estimates 100 million barrels of recoverable oil
- By 2012, production rate 1,600bpd, total production 7.4 million barrels from 18 wells
- CubaPetroleo recently announced significant discovery of lighter than typical oil at Bacuranao
- Melbana project team formed, structural integration undertaken, facilities review and reservoir engineering study completed
- Melbana currently clarifying certain commercial issues prior to completing binding documentation

In conclusion: an active phase for Melbana

- ✓ Takeover offer for Metgasco in train
- ✓ Australia: Beehive decision imminent
- ✓ Australia; Tassie Shoal projects keenly poised
- ✓ Cuba: Farming out Block 9 - looking to drill in 2H 2020
- ✓ Cuba: Working to finalise a contract for Santa Cruz.